

Summary

Recommendations to accelerate solar energy use in Brazil.

Prof. Dr.-Ing. Stefan Krauter

Photovoltaik Insitut Berlin

www.pi-berlin.com

University of Paderborn

Electrical Energy Technology - Sustainable Energy Concepts

www.nek.upb.de

1. Financing:

Due to the **high interest rates in Brazil** (at least 10% per year for a financing via Brazil's Federal Development Bank – BNDES; at normal banks interest rate is 1.5% per month) PV becomes often inviable in Brazil – even at good side conditions: high solar irradiance, good match of PV power with consumption, high electricity prices, good net-metering regulation)

Suggestion: Building a **finance-links** from European sources (e.g., interest rates for large PV projects in Germany: 3.5-4% per year), Problem: Banks avoid any risk. Look for **Crowd-funding** (example China: people can invest in single modules in a large PV project via an Internet-platform)

2. Lack of Information & Publicity:

Potential **investors** in Brazil often do not know a lot about PV, therefore they are afraid to invest. **Cultural tendency** is being more a **follower** rather than a **pioneer**. This tendency is even amplified by high interest rates for applications at comfortable conventional bank products.

Suggestions: Internet platforms such as IDEAL www.americadosol.org or several Facebook and Twitter groups are helpful and should be extended. A **telenovela with PV** as a background scenario would create broad publicity and acceptance (usually background is mining or cattle). Further dissemination via **newspaper articles**, reports, seminars, exhibitions and in particular **good examples** are be helpful.

3. Lack of Education & Training:

Lack of competent installers, effective tools, and adequate installation material (e.g.; lack UV stability for cables, stainless-steel screws or PV module clamps are hardly available, set-up of foundations are costly).

Suggestions: Collaboration with SENAI, including certification of installers; further engineering university courses, including practicals; international exchange (e.g., via GIZ or DAAD), mobile school for PV for remote areas

4. Additional issues: Metering equipment, delays

Bidirectional metering devices for net-metering are sometimes accepted by some utilities, sometimes not (LIGHT), lack of interest by utilities to get successful PV projects, unnecessary delays

Suggestions:

Showing **good examples**, learning from other countries (e.g., via GIZ)

Binding list by ANEEL for general acceptance of metering equipment (eventually using international accepted standards), severe consequences for delays by utilities. **Going public** with artificial delays.

Thank you very much – have a good way home !

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